Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (currently amended) A stent delivery system for use in a body lumen, the body lumen including a main vessel and a branch vessel, the branch vessel including an ostium, the system comprising:

a catheter comprising a catheter body having a distal end, a proximal end, a longitudinal axis and a lumen;

an expansion device disposed near the catheter body distal end;

a stent having a wall comprising struts and connectors forming multiple passageways and further comprising a side hole adapted to provide access to [[a]] the side branch, said stent being disposed over the expansion device; and

an ultrasound transducer disposed near the catheter body distal end and positioned for transmitting and receiving ultrasound signals through said side hole such that both a longitudinal and an ~~axial~~ radial position of [[an]] the ostium of [[a]] the branch vessel ~~of said body lumen~~ is determined in relation to said side hole.

2. (canceled)

3. (original) The stent delivery system as in claim 1 wherein said ultrasound transducer is disposed inside said expansion device.

4-8. (canceled)

9. (original) The stent delivery system as in claim 1 further comprising a guidewire at least partially disposed in said lumen.

10. (currently amended) The stent delivery system as in claim 7 further comprising a guidewire at least partially disposed in said lumen and passing through said ~~passageway~~ lumen.

11. (original) The stent delivery system as in claim 1 further comprising a controller coupled to said transducer.

12. (currently amended) A stent delivery system, said system comprising:

a catheter comprising a catheter body having a distal end, a proximal end and a lumen;

a balloon disposed near said catheter body distal end;

a stent having a wall comprising struts and connectors forming multiple passageways and further comprising a side hole, said stent disposed over said balloon;

an ultrasound transducer housing having a distal end, a proximal end, and a passage ~~through said housing~~ extending along a central axis of said housing between said distal and proximal ends, said housing having a transducer coupled thereto; and

a positioning guidewire at least partially disposed in said catheter lumen, said guidewire passing through said transducer housing ~~passageway~~ passage.

13-21. (canceled)

22. (currently amended) The stent delivery system as in claim 1 wherein the stent is delivered within the main vessel of said body lumen such that the side hole can be aligned with the ostium of the branch vessel.

23. (new) A stent delivery system for use in a body lumen, the body lumen including a main vessel and a branch vessel, the branch vessel including an ostium, the system comprising:

a catheter comprising an elongate catheter body having a distal end, a proximal end, and a lumen;

an expansion device disposed near the catheter body distal end;

a stent having a wall comprising struts and connectors forming multiple passageways and further comprising a side opening, the stent being disposed around the expansion device; and

an ultrasound transducer positioned within the stent and configured to transmit and receive ultrasound signals through the side opening to align the side opening relative to the ostium of the branch vessel.

24. (new) The system of claim 23 wherein the ultrasound transducer is positioned in axial and radial alignment with the side opening of the stent.

25. (new) The system of claim 23 further comprising an transducer housing having a distal end, a proximal end, and a passage extending along a central axis of the housing between the distal and proximal ends, the transducer housing having the ultrasonic transducer positioned thereon.

26. (new) A stent delivery system for treatment of a vessel bifurcation, the vessel bifurcation including a main vessel and a branch vessel, the branch vessel having an ostium, the system comprising:

a stent having a wall comprising defining a side opening between proximal and distal ends of the stent; and

an ultrasound transducer positioned within the stent and configured to transmit and receive ultrasound signals through the side opening to align the side opening relative to the ostium of the branch vessel.

27. (new) The system of claim 26 wherein the ultrasound transducer is positioned in axial and radial alignment with the side opening of the stent.

28. (new) The system of claim 26 further comprising an transducer housing having a distal end, a proximal end, and a passage extending generally along a central axis of the housing between the distal and proximal ends, the transducer housing having the ultrasonic transducer positioned thereon.